In this assignment you need to write a harmless polymorphic virus code and test, as discussed in class. This requires you to generate a virus code and document the process. Making the document clear and easy to understand is key to doing well in this work.

- a) The Virus program should have the flow as follows. It should have a function infect()with no parameters which will copy itself into a source file (.ext of your choice). It should call selectTarget()to identify a target. If a target exists, it should call copyCode()with the target. If no target exists, it should occasionally call payload(), say with a probability of 1 in 4. Add the line infect()to the bottom of your code so the code will run automatically when loaded. Note that the codes need to be encrypted.
- b) Write a program to detect your virus.